



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

CR

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,176	07/25/2003	Alan Blake	York/102	3876

23410 7590 03/03/2004

COHEN & SAKAGUCHI LLP
2424 SE BRISTOL STREET, SUITE 300
NEWPORT BEACH, CA 92660

EXAMINER

VALENTI, ANDREA M

ART UNIT PAPER NUMBER

3643

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,176

Applicant(s)

BLAKE ET AL.

Examiner

Andrea M. Valenti

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 6-8, 10-12, 29-31, 33-35 are objected to because of the following informalities:

The protein acronyms are not defined in the specification nor in the terms of the claim limitation. Applicant should spell out the meaning of the acronym and identify for instance what a 'GFP' is.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17, 20, 22-40, 43, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,892,199 to Huyler in view of WO 00/49150 to Gong et al.

Regarding Claims 1 and 25, Huyler teaches an aquarium kit comprising: a tank (Huyler Fig. 1 #10) and an excitation light source (Huyler Fig. 11 #164), wherein said light source is mountable on said tank and said light source is configured to emit light. Huyler is silent on an ornamental fish that expresses one or more fluorescent proteins at a level sufficient that said fish fluoresces upon exposure to said excitation light source. However, Gong teaches an ornamental fish that fluoresces when exposed to an

Art Unit: 3643

excitation light source (Gong abstract). It would have been obvious to one of ordinary skill in the art to modify the teachings of Huyler with the fish taught by Gong since the modification is merely the selection of an alternate equivalent know fish for enhanced aesthetic appeal to the tank.

Regarding Claims 2 and 26, Huyler as modified teaches the light source is a blue light, a fluorescent light or an ultraviolet light (Huyler Col. 10 line 51).

Regarding Claim 3, Huyler as modified teaches an ornamental fish which expresses one or more fluorescent proteins at a level sufficient such that said fish fluoresces upon exposure to said excitation light source (Gong abstract).

Regarding Claims 4 and 27, Huyler as modified teaches an ornamental fish is a transgenic fish comprising one or more chimeric fluorescence genes encoding said one or more fluorescent proteins (Gong abstract).

Regarding Claims 5 and 28, Huyler as modified teaches the light source is a blue light, a fluorescent light pr an ultraviolet light (Huyler Col. 10 line 51)..

Regarding Claims 6 and 29, Huyler as modified teaches the ornamental fish comprises a GFP (Gong page 3 line 25).

Regarding Claims 7 and 30, Huyler as modified teaches the ornamental fish comprises a EGFP (Gong abstract).

Regarding Claims 8 and 31, Huyler as modified teaches the ornamental fish comprise: a BFP (Gong page 52 claim 6).

Regarding Claims 9 and 32, Huyler as modified teaches the ornamental fish comprises a coral fluorescent protein (Gong page 52 claim 6).

Regarding Claims 10 and 33, Huyler as modified teaches the ornamental fish comprises a EBFP (Gong page 52 claim 6).

Regarding Claims 11 and 34, Huyler as modified teaches the ornamental fish comprises a YFP or EYFP (Gong page 52 claim 6).

Regarding Claims 12 and 35, Huyler as modified teaches the ornamental fish comprises a CFP or ECFP (Gong page 52 claim 6).

Regarding Claims 13 and 36, Huyler as modified teaches the ornamental fish is a stable transgenic fish line obtained by a method comprising the steps of:

(a) obtaining an ornamental transgenic fish comprising one or more chimeric fluorescence genes positioned under the control of a promoter, wherein the transgenic fish expresses one or more fluorescent proteins encoded by the one or more fluorescence genes at a level sufficient such that said fish fluoresces upon exposure to an excitation light source, and (b) breeding the ornamental transgenic fish with a second fish to obtain offspring; and (c) selecting from said offspring a stable transgenic line that expresses one or more fluorescent proteins (Gong page 21 Example IV, first paragraph and page1 lines 8-9).

Regarding Claims 14 and 37, Huyler as modified teaches the ornamental transgenic fish is a transgenic zebrafish (Gong abstract).

Regarding Claims 15 and 38, Huyler as modified teaches the ornamental transgenic fish is a transgenic zebrafish (Gong abstract).

Regarding Claims 16 and 39, Huyler inherently teaches the second fish is a zebrafish, etc. (Gong page 21 line 15-16).

Regarding Claims 17 and 40, Huyler as modified teaches the second fish is a zebrafish, etc. (Gong page 21 line 15-16).

Regarding Claims 20 and 43, Huyler teaches the ornamental transgenic fish expresses more than one fluorescent protein and said fluorescent proteins have different colors (Huyler).

Regarding Claims 22, 23, and 45, Huyler as modified teaches the fish is bioluminescent (Gong abstract).

Regarding Claims 24 and 46, Huyler as modified teaches one or more of gravel, a water heating element, a plant and an aeration unit (Huyler Col. 8 line 22 and 25).

Claims 18, 19, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,892,199 to Huyler as applied to claims 1 and 25 above, and further in view of U.S. Patent No. 5,775,260 to Jansen.

Regarding Claims 18 and 41, Huyler is silent on a second excitation light source which emits light of different wavelength than said excitation light source. However, Jansen teaches a fish tank with a second excitation light source (Jansen #76). It would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention for the enhance lighting effects taught by Jansen.

Regarding Claims 19 and 42, Huyler as modified teaches the first excitation light source (Jansen #50) is located on a first side of said tank and said second excitation light source (Jansen #76) is located on the opposite side of said tank.

Claims 21 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,892,199 to Huyler as applied to claim 25 and 3 above, and further in view of U.S. Patent No. 6,474,265 to Powell.

Regarding Claims 21 and 44, Huyler as modified is silent on the tank comprising one or more dividers which divide said tank into two or more chambers. However, Powell teaches a tank divider (Powell #14). It would have been obvious to one of ordinary skill in the art to modify the teachings of Huyler with the teachings of Powell at the time of the invention to group certain fishes together (e.g. to prevent undesired breeding).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


U.S. Patent Pub. 2003/0157519 A1; U.S. Patent Pub. 2003/0092098 A1; U.S. Patent No. 4,133,294; U.S. Patent No. 5,324,940; U.S. Patent Pub. 2003/0221206 A1; U.S. Patent No. 6,265,548 B1; U.S. Patent No. 6,380,458 B1; U.S. Patent No. 6,469,154 B1; and U.S. Patent Pub. 2002/0178461.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 703-305-3010. The examiner can normally be reached on 7:30am-5pm M-F; Alternating Fridays Off.


Art Unit: 3643

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 703-308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Andrea M. Valenti
Examiner
Art Unit 3643

19 February 2004


Peter M. Poon
Supervisory Patent Examiner
Technology Center 3600